Please replace the paragraph beginning at page 17, line 16, with the following rewritten paragraph:

--Referring now to FIG. 9, the operation of cartridge 10g will now be described. A sample, such as whole blood, is inserted into pressure head 40, while an acceptor reagent, such as water or saline is inserted into pressure head 42. Two parallel laminar streams will flow through channel 72 as the liquids travel from channels 14, 16. Smaller components of the sample stream will diffuse into the acceptor stream. The two parallel flows are then split up into separate reservoirs 74, 76 at the end of H-Filter 70. Reservoir 74 will then contain a sample solution with a reduced concentration of the extracted component, while reservoir 76 contains the acceptor reagent containing the extracted reagent at a level of some fraction of its original concentration in the sample. The contents of both reservoirs 74, 76 can then be harvested from cartridge 10g for future use, or be processed through further integrated microfluidic structures.--

Please replace the paragraph beginning at page19, line 15, with the following rewritten paragraph:

A simple detection method for analyzing the results of an assay performed in a microfluidic format according to the present invention is shown in FIGS. 15-17. Referring now to FIG. 15, a basic T-Sensor device 12 is shown having an indicator port 14a and an analyte port 16a. Port 14a is connected to main channel 18 by a sample channel 14, while port 16a is connected to channel 18 by an analyte channel 16. In FIG. 15, a high concentration analyte is loaded into port 16a, and when T-Sensor 12 is operated with an indicator solution within port 14a, a diffusion pattern forms as shown at 90. In FIG. 16, a low concentration analyte is loaded into port 16a, and a different diffusion pattern 92 is generated.

Please replace the paragraph beginning at page 20, line 1, with the following rewritten paragraph:

--At some point along channel 18, the reaction between the analyte and indicator will become sufficiently intense to be seen visually. This point in channel 18, which is located some distance from channels 14 and 16, will correlate with a particular concentration of analyte within channel 18. Optical aids, such as a magnifying lens,

colored filter layer, or slit may aid in the manual visual interpretation of the concentration.--

Please replace the paragraph beginning at page 20, line 8, with the following rewritten paragraph:

--An example of a device for simple quantitation of a microfluidic device which requires no external instruments is shown in FIG. 17. Referring now to FIG. 17, a convoluted T-Sensor 12e having ports 14a,16a and channels 14, 16 contains a main channel 18a upon which a viewing window 100 has been inserted. In addition, a chart 102 is placed near T-Sensor 12e which contains indicia representative of different concentrations of the desired analyte. During operation of T-Sensor 12e, quantitation is achieved by interpreting the point at which visible reaction has occurred at the interface between the sample and indicator. The only portion of channel 18a visible is seen through viewing window 100. In this embodiment, the analyte may be at a 4+ to 5+ amount (1+ being low, 10+ being high) because in the 6+ view area of window 100, there is barely an reaction visible.--

IN THE CLAIMS

Please cancel claims 1 and 2.

Please amend claim 3 as follows:

3 (Once amended). A device for moving fluids through a microfluidic channel, comprising:

a microfluidic channel having an inlet and an outlet;

a fluid contained within said channel;

and an absorbent material coupled to said outlet of said channel,

whereby when said fluid within said channel initially contacts said absorbent material, a driving force is created which moves said fluid through said channel to said